3: Mariner F-5 (1806-1810) 1818
OU9 Tonga OU9

Hereditary.	*Toofoonga fo vaca*; canoe-builders.	Followed both by *mataboolee* and *mooas*.	555
	Toofoonga fono le; cutters of whale-teeth ornaments.		461
	Toofoonga taboo; superintendants of funeral rites.		565
	Toofoonga ta maca; stone-masons, or makers of stone vaults.	Followed both by *mooas* and *tooas*.	396
	Toofoonga jia cobenga; net-makers.		306
	Toofoonga toty ica; fishermen.		767
	Toofoonga langafelle; large house-builders.		324
Hereditary or not.	*Toofoonga ta tattow*; those who perform the tattow.		286
	Toofoonga tongi acow; club-carvers.		226
			331
	Toofoonga fy cava; barbers or shavers with shells.		305
Hereditary.	*Tangata fe oomoo*; cooks.	Followed only by *tooas*.	322
	Kyfonnoa; peasants.		306
			252
			241

Property in these islands, as may easily be conjectured, consists principally in plantations, houses, and canoes, and the right of succession to it is regulated by the order of relationship, as given under the head of Nobles, p. 83, so in like manner is the right of succession to the throne. 421 428

Having now given a view of the rank of individuals in society, with reference to religion, civil government, and professional occupations; we have now to consider it in respect to old age, sex, and childhood. 128

Old persons of both sexes are highly reve- 888

3: Mariner F-5 (1806-1810) 1818
OU9 Tonga OU9

who follow this profession are sailors: their mode of catching fish is chiefly with the net, though they sometimes make use of the line and hook.

LANGA FALLE, house-building. Every man knows how to build a house, but those whose business it is have chiefly to erect large houses on *maláis*, consecrated houses, and dwellings for chiefs. The general form of their houses is oblong, rather approaching to an oval, the two ends being closed, and the front and back open; the sloping thatched roof descending to within about four feet of the ground, which is generally supported by four posts; the larger houses by six, or sometimes more. The chief art in building a house consists in fastening the beams, &c. strongly, with plait of different colours, made of the husk of the cocoa-nut, in such a way as to look very ornamental; the colours, which are black, red, and yellow, being tastefully disposed. The thatch of the superior houses is made of the dried leaves of the sugar-cane, and which will last seven or eight years without requiring repair. The thatch of the common houses is made of matting formed of the leaves of the cocoa-nut tree, and which lasts about two or three years; but being much easier to make than the other, it is more frequently used. The flooring is thus made: the

/137 cont./

412 The large machete (hele pelu) is generally bought readymade
[439] (total length 60-70 centimeters), and is easily obtainable in the commercial centers of the Archipelago. The knife tip which is bent
[824] slightly upwards is usually cut off. The frequently broken handles are skilfully replaced by self-made wooden shells (feta'u wood). This machete is an all-purpose instrument. In house-building it serves for the most diverse tasks wherever something needs to be cut, knocked off, or leveled (planed), and for many Tonga it replaces the small transverse hatchet. Beyond that, the knife has a wide range of uses in the hands of men, women and children, from cutting finger- and toenails to various tasks on the plantations.

342 Many Tongans (especially commoners) feel it is important to erect
463 what they regard as a well-built, solid dwelling on their property, and
331 secure the help of a specialist who carries out the work with several helpers (relatives of the "owner," his friends and other villagers). If, later, a second house is needed on his place, he usually builds it himself (alone or with the help of members of the family and other relatives or friends).

In 'Uiha/'Uiha (Ha'apai), in 1952, 76 dwellings with ancient Tonga ground plan were carefully examined.

342 Of these, 54 were built by house builders (or Tongans who were
463 regarded as house builders). Until recent times their work was acknowl-
465 eged only with food. In only seven cases was the builder paid with money
331 (sums between 8 and 40 $ T.); four of these cases involve an impoverished refugee from Niu Fo'ou who, in 1951, worked only as house builder in 'Uiha, hence these cases should be regarded as exceptions. In two cases that took place 50 years ago, the builder was remunerated with mats and tapa, while in a case that occurred 30 years ago a rather large quantity of coconut-fiber cord (kafa) was given.

342 The remaining 22 houses were built by natives who are not special-
463
331

[ʻUiha (Haʻapai)]
[Fungamisi (Vavaʻu)]

331 /137 cont./
342 ists. In 15 cases the owner of the property was his own builder, in
463 seven cases relatives, friends or villagers built the house for him. Of these structures, 19 were built after 1940.

In rare cases were houses built by builders of "laymen" alone.
[465] Usually as many as eleven helpers worked together, whose work was remunerated only with food.

342 The cost of materials for all houses (ancient Tongan ground plan)
435 range from 0 (only native material, or donated old corrugated metal and building timber) to 70£T. (new corrugated sheet metal, building timber, nails).

342 /138/ In the same town, the same year, 19 European-type dwellings
463 were carefully examined. Of these, one was built about 50 years ago by
331 a white man, 15 were erected by Tongans who are house-builders (or regarded as such), and three structures were put up by natives who were not specialists, for their own use (some 50 years ago). Here
[465] too the work of the builders was largely acknowledged only with food. In two cases (1908 and 1943) the builders were paid with mats and tapa and in three cases (1910, 1951, 1951) with money (6 - 10£T.). The
[435] helpers involved (1-8) each received only food. The cost of material for these buildings runs between 20£T. (material bought secondhand) and 400£T. (good material, medium-sized house).

Corresponding surveys in the same year in Fungamisi/Vavaʻu showed:

[465] Of 24 carefully examined dwellings with ancient Tongan ground plan, only five were erected by house-builders (or by Tongan regarded as house-builders); four of these were self-built, in the fifth case the work was acknowledged only with food. The remaining 19 houses were put up by Tongans who are not specialists; in 18 cases the natives built for themselves, in one case a son coming from another

331 /138 cont./
342 village built a house for his mother. Fourteen of these "laymen"
463 buildings were put up after 1940. The builders or "laymen" seldom
[602] worked alone. In most cases they had up to five helpers (often
[465] relatives) whose work was acknowledged only with food. In many cases
[435] there was no outlay for building material, since the builders limited themselves to native raw materials or were given only corrugated metal and building timber; for the rest of the buildings, up to 12 £T. was spent for corrugated metal, building timber and nails.

331 Of 16 European-type houses examined at the same time, 11 were
342 built by Tongans who are house-builders (or regarded as such). The
177 work of the builders (some of whom were relatives) was acknowledged
463 only with food, except in two cases; one was given building material
[602] (wood), the other was given money. Five houses were built by non-
[465] specialist natives for themselves.--Altogether, two houses were built individually. For the rest of the 14 structures, 2 to 20 helpers were co-workers. Their work was here too acknowledged only with food while [465] they were building, except for one case in which money was given. For [435] building material--aside from gifts--between 20 £T. (old material) and 1000 £T. (good material, very large house) was spent.

342 These investigations can give us various clues. We realize that most Tongans are apparently still capable of building by themselves (Fungamisi example) a simple dwelling (ancient Tongan ground plan). [463] However, as a result of the "liberation" of the people, the house-[331] building specialists, of whom there were some even in ancient Tonga, seem to have obtained a greater range of work insofar as many commoners depend on them for help (as did many chiefs in former times). The 342 wish to have a well-built house in ancient Tongan style is considerably 178 greater, according to the figures quoted above, in a more remote village like 'Uiha than in a settlement near a harbor, like Fungamisi

/139/

342 where, considering the buildings in the seaport of Neiafu, the old-
178 style Tongan houses may be regarded as mostly self-built makeshifts in a light construction. (367)

367. See p. 193.

342 The dissemination of "European-type construction" (wood-corrugated
197 metal-rectangular buildings) need not necessarily--on the basis of the
463 aforementioned figures--lead to an increase in house-building specialization; some skilful Tongans, even as "laymen," know how to build such types of houses. (368)

368. All European-style houses are, incidentally, today built by Tongans without guidance by whites. The natives can also build a European shed on concrete bases and even know how to make concrete tiles by themselves (from the necessary imported material).

(333)

342 Moreover, we learn that money which circulates rather freely in the
436 Archipelago has heretofore played no great role in the employment of
463 house-builders. The efforts of specialists and helpers are mainly
465 acknowledged, in the old way, simply with good food (earth oven)
331 during the building. (369)

369. Even in the "modern" work of erecting European-style structures.

342 The building material for the construction of a house with the ancient
435 Tongan ground plan and coconut-palm covering can still, as in old
198 times, be procured without financial expenditure, so that the entire process can be carried through without an outlay of cash, (370)

370. If the "owner" does not have enough pigs and products from his plantation at his disposal, he will of course have an indirect cash outlay in buying flour, sugar, corned beef, etc., in order to feed the builders.

and only with the cost of good food for all workers; this applies to a remote settlement ('Uiha) as well as to a village near a seaport (Fungamisi).

/140 cont./

342 313 [824] [439] trees (Bischofia javanica Bl.) or toa trees (Casuarina equisetifolia L.) at his disposal on his plantation (bushland)--as in old times--and does not wish to sacrifice valuable breadfruit trees to make posts, then he must go to an uninhabited island where--again as in old ways--he will look for suitable trees, or else he will buy imported Canadian or New Zealand building timber which, moreover, is preferably used instead of coconut palm trunks for the beams. To build a house in old Tongan style, which is supposed to have board walls and be covered with corrugated sheet metal, and especially to put up a European-style construction, a person must, in good time, buy enough corrugated metal, imported wood, nails and possibly cement in the commercial centers of the Archipelago and transport them to his native island in the small cutters.

342 177 439

342 264 574 /141/ Since a man must generally supply food for the specialist (in case such a one is building the house) and all his helpers (otherwise the orderly course of the work might easily be endangered as a result of growing apathy), he must, in due time, raise quantities of food plants and, in addition, depending on the size of the understaking, fatten a number of pigs. If a man does not wish--or is not able--to offer hospitality in this ancient Tongan style, he must have in readiness sacksful of flour and sugar, large cans of corned beef, tea and, if possible, loaves of bread, in order to provide meals.

342 331 After all preparations have progressed to the point where they can guarantee a steady flow of work, the day is set for the building to begin. The work force assembles on the day announced; the work begins.

[177] [178] The following account of the building of a house in November/December 1951 on Nomuka may show the juxtaposition (or fusion) of old and new:

/141 cont./

342 For a long time the "district officer" /cited in English/
197 living on Nomuka has wanted to move out of the house of his parents-
198 in-law and build his own house on a property he owns in the village.
463 He talks over his plan with Vilingia, the (approximately 45-year-old)
331 house-building specialist on Nomuka, who has been trained in Fiji as a carpenter. They decide to build a house with ancient Tongan ground plan but with "improved beaming," wooden walls with a cement base, windows and doors and a corrugated sheet metal roof. Vilingia draws a construction plan in an exercise book. The district officer
(439) buys four metal drums of cement, Canadian building timber, corrugated sheet metal and nails, flour, fat and sugar in Nuku'alofa and has the supplies brought to Nomuka in cutters. Six men from Nomuka sail to
(484) the uninhabited island of Tonumea, a half-day's journey distant, there
(313) chop down 12 breadfruit trees, cut them up as beams and take them
(283) home. Coconut-fiber cord is also made in sufficient quantities. After all the material has lain ready for several weeks, the district officer decides to start the building. Shortly before the date fixed,
(251) a group of natives sail to the neighboring island of Nomuka Iki, there shoot one of the half-wild cows of the "boss," cut it up properly and, in Nomuka, salt down the meat in wooden tubs, under the supervision of an aged Tongan.

342 On the day the building is to commence, some 20 men from the
476 village (young and old in approximately the same number) assemble early
313 in the morning at the previous dwelling of the "boss," and, after a
331 breakfast of fried cakes /cited in English/ (Tonga: keke) and orange-leaf tea, they repair to the plantations, led by the carpenter Vilingia, where, because of the exalted position of the "boss," they take the liberty of selecting and cutting down the coconut palms needed for the rafters, without asking permission from their respective

331 /141 cont./
342 owners. The palms chopped down with the big axe (toki lahi) (see
476 above) are cut up with the same axe into nine-foot (or eleven-foot)
(313) lengths and, for further preparation, are placed on two smaller
342 (properly notched) logs. The "jacked-up" logs are then provided with
476 longitudinal grooves by two Tongans standing opposite each other
335 who, with the big transverse hatchet (fale-vatu lahi) (see above),
412 strike blow after blow, each /worker/ forming a longitudinal groove;
331 /142/ the two longitudinal grooves meet as they are struck, so that the second of the two workers can, with his blows, simultaneously tear the bark and wood out of the resulting fissure and thus lay it open. After turning the log slightly on its supports, another Tongan, /applying/ blow after blow with the big axe, slits the resulting work-piece (the rafter-to-be) on one side. After a further turning, the two men start cutting another lengthwise groove with the transverse hatchet. The process is repeated successively until 10,12 or 15 rafters (kahoki), depending on the circumference of the trunk, are marked off all around the log. Then the kahoki (which already have a preliminary slit on one side) are separated from the log with the big axe and a pointed club (crowbar). With a machete the rough chips are removed and the rafters are loaded on two-wheel, horse-drawn carts and taken to the building site in the village.

331 342 335 178 179 There are no reports about how rafters were made in ancient Tonga. However, it is to be assumed that today's work which seems so primitive to us was carried out in the same way in those days, and that there is a change only with respect to the axes, the iron blades of the transverse hatchets and the measurements with English foot rules.

342 335 476 461 331 The groups of natives, each working on the felled coconut palms (young and old separately, but also individual older men among the young ones), busily engaged, though soon stopping for rather long

331 /142 cont./
342 rest periods, make 110 rafters by early afternoon. Then they go back
335 to the building site and around 16 o'clock they each have an earth-
476 oven meal, prepared in the meantime by their wives and other women,
[461] from the supplies of the "boss"; each man is served a portion (yams,
[264] manioc, kape, bananas, pork, beef) in a traditional coconut-leaf
[262] basket and with it a coconut mug containing fish soup. Thereafter the
[415] work in the village is resumed: five Tongans sitting crosslegged
[516] "plane" the rafters by striking them with the small transverse hatchets (fale-vatu si'i, toki taha-taha, toki tele) or with the machete, two natives cut more rafters out of trunks which are brought from the plantations, and 12 Tongans hold a kava gathering at the site to "sanction" the building project, while three women prepare the
[264] evening meal. This is eaten when twilight sets in (around 18:30):
[262] everyone present gets three or four fried cakes and highly sweetened orange-leaf tea in coconut bowls. Around 19 o'clock everybody goes home.

342 On the second building day, while several younger natives split
313 off and plane more rafters and a kava circle of elders is gathered on
335 the building site, six Tongans and the carpenter go to the plantations
331 (after the fried-cake and orange-leaf-tea breakfast) to get sections of curved beams (for the narrow sides of the new building). According to an apparently very old system, these are cut out of coconut palm
342 trunks that have grown with a special curvature. Again the men work
335 with the big axe and the big transverse hatchet. From each palm a
331 curved section of beam is obtained. Around 13 o'clock- after they
[264] have cut up the seventh palm, they grow listless, build a fire, roast a few green bananas in it, have a snack and then go back to the village, leaving the remaining five palms of the day's quota for the
342 following day. Around 14:30, /143/ 'ota 'i mango (a refreshing drink
272 of grated green mangoes, grated coconut meat, water and sugar) is
264

/143 cont./

342 served, and at 15 o'clock everyone gets his basket with his share of
272 the earth-oven meal: manioc, kape, sweet potatoes and salted
264 beef, along with a coconut mug of beef broth. In the afternoon, while
342 a few natives continue splitting and planing rafters, others, with
331 the huo lafa-lafa (shovel iron), (374)

374. See p. 233-234.

[276] level the ground measured off by the carpenter for the house. Under a
[571] temporary corrugated metal roof a kava group of ten older men is
[264] gathered. At 18:45 fried cakes and orange-leaf tea are again handed out. Then the men slowly go home; a few natives take along a basket of leftovers from the afternoon meal.

[332] On the third day of work, more rafters and curved sections of
[412] beams are made; the ground plan of the house (in ancient Tongan style)
[177] is marked out, and an approximately 15 centimeter excavation is dug (tools: two huo spade [a small iron blade set on an old digging stick;
[276] see page 234] and a European shovel). Four older Tongans form a kava
[571] circle. The meals are the same as on the previous days. The work
[796] stops toward 16 o'clock, for at 17 o'clock the usual church service (Friday) is held.

[335] On the subsequent work days the posts and beams (native and Canadian wood) are cut and planed with the carpenter's tools (transverse hatchet, saws, planes, adzes); the work on the rafters (total number 250) also continues. The meals corresponds to those
[276] of the preceding days. The kava gathering of older men continues to
[571] assemble on the building site.

342 Finally, the four customary posts that are to carry the roof are
331 set in place. However, the carpenter intends to give the house more
335 room and to replace the "disturbing" posts with special supports of Canadian building timber, leading upward obliquely from the side walls;

/ 143 cont./

342 hence only temporary posts are set up. Into the grooved ends the men
331 place the horizontal beams, their position tested with an English
335 water level, and raise and adjust the posts with a traditional lever
[177] tied to each post. Four crossbeams are laid over the longitudinal
[401] beams, and the parts that belong together are lashed with coconut-fiber
[284] cords (kafa) that have been soaked in water. Then the men place two more longitudinal beams over the ends of the cross beams and fasten them the same way with kafa. They put up the ridge lath and ridge
[284] board, supported, for the time being, by provisional posts, at the proper height above the construction and hang the notched rafters to the ridge lath with coconut-cord lashings. The downward extending rafters rest on the longitudinal beams lying on the ends of the
[177] crossbeams. Here they are lashed and at the same time nailed on with European iron nails; this is the part that must then bear the main burden of the construction. The rest of the longitudinal beams are fastened to the lower part of the rafters and to the upper part of the roof with coconut lashings and nails. Then the roof laths are lashed (from the inside) and nailed down. The traditional roof brackets are attached to the crossbeams.

342 Up to this point the entire work procedure--except for the
331 European or Europeanized tools and the use of nails--resembles the
177 ancient Tongan house construction. But now, in place of the coconut-
335 leaf mats (pola) (to be plaited by the women) /144/ pieces of corrugated sheet metal are nailed onto previously applied strips, as roof covering. Then three curved sections of a beam are joined to form a round beam (corresponding to one of the rounded narrow sides of the house). Instead of the customary system of coconut-fiber lashing, they follow the European method of boring through the obliquely sawed ends with a drill and joining them in iron clamps

/144 cont./

342 331 335 177 (284) with wooden tenons. Two of these round beams form the framework of one narrow side of the roof; as in old times, they are set on the ends of the main horizontal beams (375)

375. That is, the horizontal beams resting on the four posts.

(412) and fastened to them with coconut-fiber lashing. Rafters and roof laths are tied over them and nailed, and here, too, strips and corrugated sheet metal--laboriously cut with sheet-iron shears--are nailed on.

It is only now, when the roof is finished, that the men apply themselves to the walls which are built in a quite "modern" form. (333) They pour a cement foundation all around the house (according to the ground plan) in which screws are inserted. To these they screw beams which form the basis for a wall framework to be built between the foundation and the edge of the roof. On this framework they nail the wall boards, allowing for window- and door- openings. Then they take out the four posts which are so important for the ancient Tongan house (which here were set up only temporarily) and replace them with supports extending obliquely from the base of the walls to the joints. The roof now rests partly on the walls--a very considerable change for Tonga.

342 331 The rest of the work is slowly carried out, for the general enthusiasm has abated, especially since the rations have become scarcer (after the boss's last beef has been consumed). Because Christmas preparations are now beginning in the village, only a few willing workers appear at the building site. They cover the floor of the house with sand, paint the outside of the new building with light blue oil paint, attach a gutter and start to make the doors, until the building material gives out and the work stops. However, the

/144 cont./

331 342 house is now already occupied.

[461] This house building took 29 work days. After a forced pause of several weeks to procure further building material from distant Nuku'alofa, the work will soon be finished.

331 342 177 178 In this way, European tools (or parts of tools) and material, as well as European building methods have found their way into Tongans to build a house has not been displaced by this specialization. In fact, division of labor among the workers in building a house and their compensation seems little changed. This persistence is also evident in the way the Tongans largely retain their ancient building methods.

b) Household Equipment

177 European influences have brought about enrichment and change in the field of household equipment.

352 415 354 /145/ The ancient Tongan furnishings of a dwelling consisted essentially of seat mats, sleep mats, headrests, baskets of various kinds and sizes (to hold clothing, combs, fish hooks, tools, etc.), bottle gourds, wooden bowls, lamps (burning coconut oil) and the all important and typical multi-footed, large kava bowl. (376)

376. See W. Ellis, An authentic narrative /cited in English/ I. pp. 95, 96, 108; J. Cook, Beschreibung.../Description/ loc. cit. VI. p. p. 285; G. Forster, loc. cit. IV. p. 329; V. pp. 139, 148; Ch. Wilkes, Narrative... /cited in English/ III. pp. 15, 16.

177 As a result of contact with whites the Tongans adopted various European household articles which seemed to them either more useful than corresponding ones of their own, or particularly "representative." In this way, what to the European eye seemed like the "emptiness" of the Tongan house was to some extent filled.

[352] Today, the inside of a dwelling looks somewhat as follows:

100: Koch--512 E-4,5 (1951-1952) 1955 OU9 Tonga OU9

342
177

9. European dwelling

342
331

10. Construction of dwelling in ancient Tongan style with modern materials

[End Plate 5]